



UNIT LEVEL COMMUNICATIONS MAINTAINER MOS 31V, SKILL LEVEL 1

EVALUATE THE OPERATION OF INTERCOMMUNICATIONS SET AN/VIC-1(V)

SUBCOURSE SS 0721

US Army Signal School
Fort Gordon, Georgia

Four Credit Hours

GENERAL

This subcourse is designed to train the skills necessary to evaluate the operation of the intercommunication set AN/VIC-1(V). This subcourse is presented in one lesson corresponding to a terminal objective supporting the following soldier's manual task.

TASK NO: 113-622-3008.

TASK: Evaluate the operation of intercommunication set AN/VIC-1(V).

CONDITIONS: This task is performed when an operator reports an uncorrected fault, as a part of PMCS, as directed by your supervisor, to identify a fault before troubleshooting, or as a final check after repairs.

You will be provided with the following:

1. Intercommunication set AN/VIC-1(V) installed in vehicle.
2. Da Form 2404.
3. TM 11-5830-340-12.
4. GTA 11-3-49.
5. DA Pam 738-750.

STANDARDS: Determine the operational readiness of the system and report the status to your supervisor without error.

OCTOBER 1987

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EVALUATE THE OPERATION OF INTERCOMMUNICATIONS SET AN/VIC-1(V)

OBJECTIVE

Upon completion of this lesson, you will be able to accurately evaluate the performance of an intercommunication set AN/VIC-1(V) and accurately record the results of the evaluation on a DA Form 2404 (Equipment Inspection Maintenance Worksheet).

REFERENCES

This lesson is based on performance measures outlined in STP 11-31V12, dated May 1987; information in TM 11-5830-340-12, Chapters 1, 2, and 4, dated January 1986; and GTA 11-3-49, dated December 1986. However, development and progress render the text continually subject to change; therefore, base your examination answers on material presented in this subcourse rather than on individual or unit experience.

1. INTRODUCTION. An operational check (op check) is normally done with the intercommunication set AN/VIC-1(V) installed in a vehicle. As a minimum, the op check is done as part of the PMCS. At the discretion of the maintenance supervisor, the op check could be done more often than the scheduled PMCS. After every repair of an item of equipment, the portion of the op check that applies to that item of equipment should be done again to ensure that the fault found has been corrected and that no other faults exist.

2. INTERCOMMUNICATION SET AN/VIC-1(V).

a. The intercommunication set AN/VIC-1(V) provides voice communications between crew members and also allows crew members to control and use the radio set that is installed with some systems.

b. The intercom may be installed in various types of combat (tracked) vehicles. The intercom is part of the installed electronic installation harness of combat vehicles and part of the installation kit when installed in tactical (wheeled) vehicles.

c. Accessory kits for the intercom consist of items such as audio accessories, installation instructions, technical manuals, and other miscellaneous parts. Accessory kits are readily installed in and removed from combat (tracked) vehicles only.

d. The basic components of the intercom set are the amplifier, audio frequency AM-1780 (which is the heart of the intercom); the crew member control box C-2298; the crew member interconnect cable CX-4723; and a power cable CX-4720 or CX-13089.

e. See Figure 1. The intercom set AN/VIC-1(V) is a highly versatile piece of equipment that can be used alone or with FM radios.

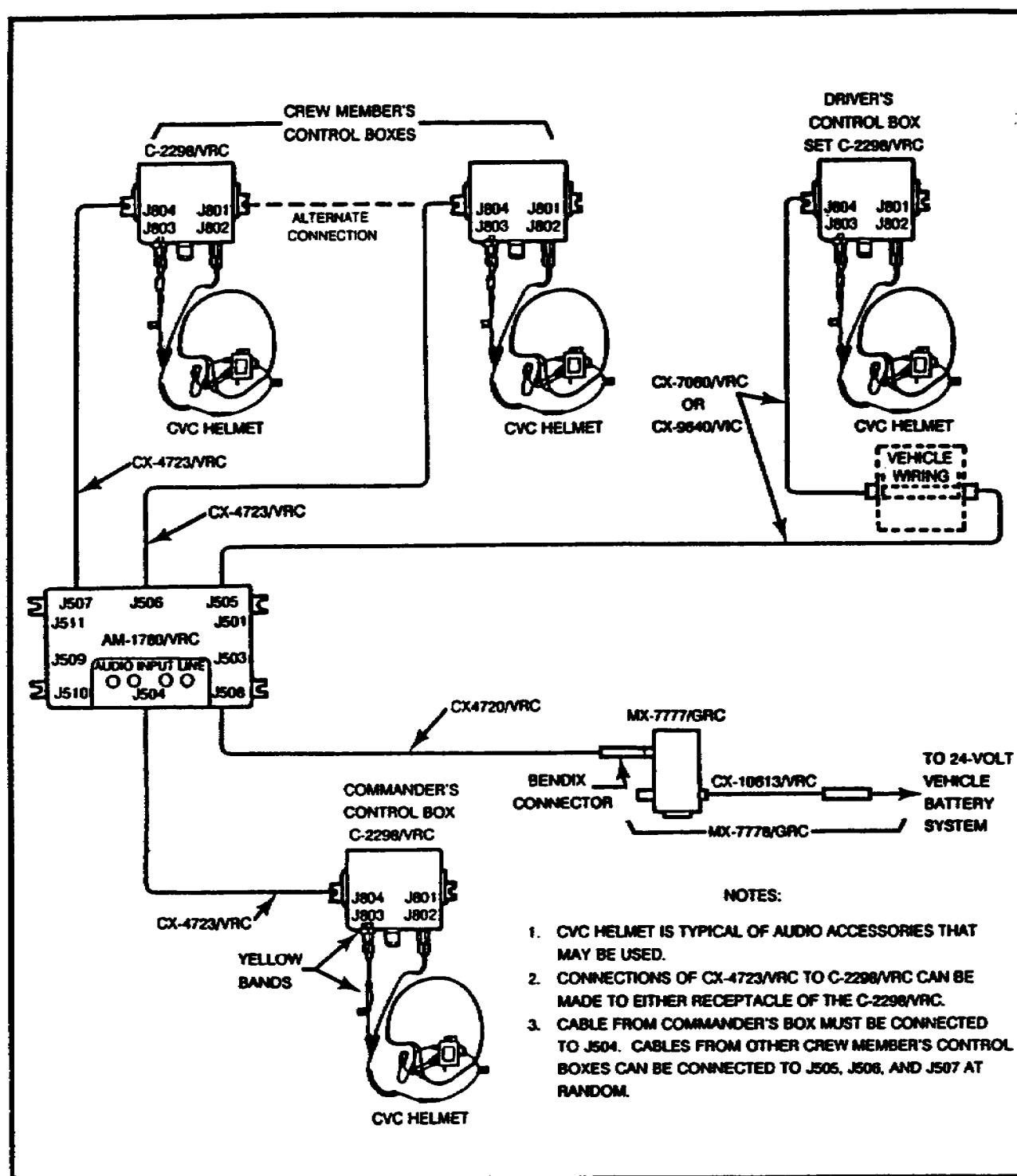


Figure 1. Typical AN/VIC-1(V) without FM radio.

f. See Figure 2. The AM-1780/VRC amplifies and controls the audio signal(s), and controls the DC power to the crew member control boxes C-2298. The commander's control box C-2298 is cabled to jack J504 on the AM-1780, and the crew member control boxes can be connected to jacks J505, J506, and J507 at

random. When the intercom is used without FM radio, power is applied to jack J508. When used with FM radio, power is applied to jack J501. The binding posts on the control panel of the AM-1780, labeled AUDIO INPUT, are for use with an additional FM receiver. The binding posts labeled TEL/REMOTE are used to connect a field telephone, a switchboard, or another intercom system to the intercom system.

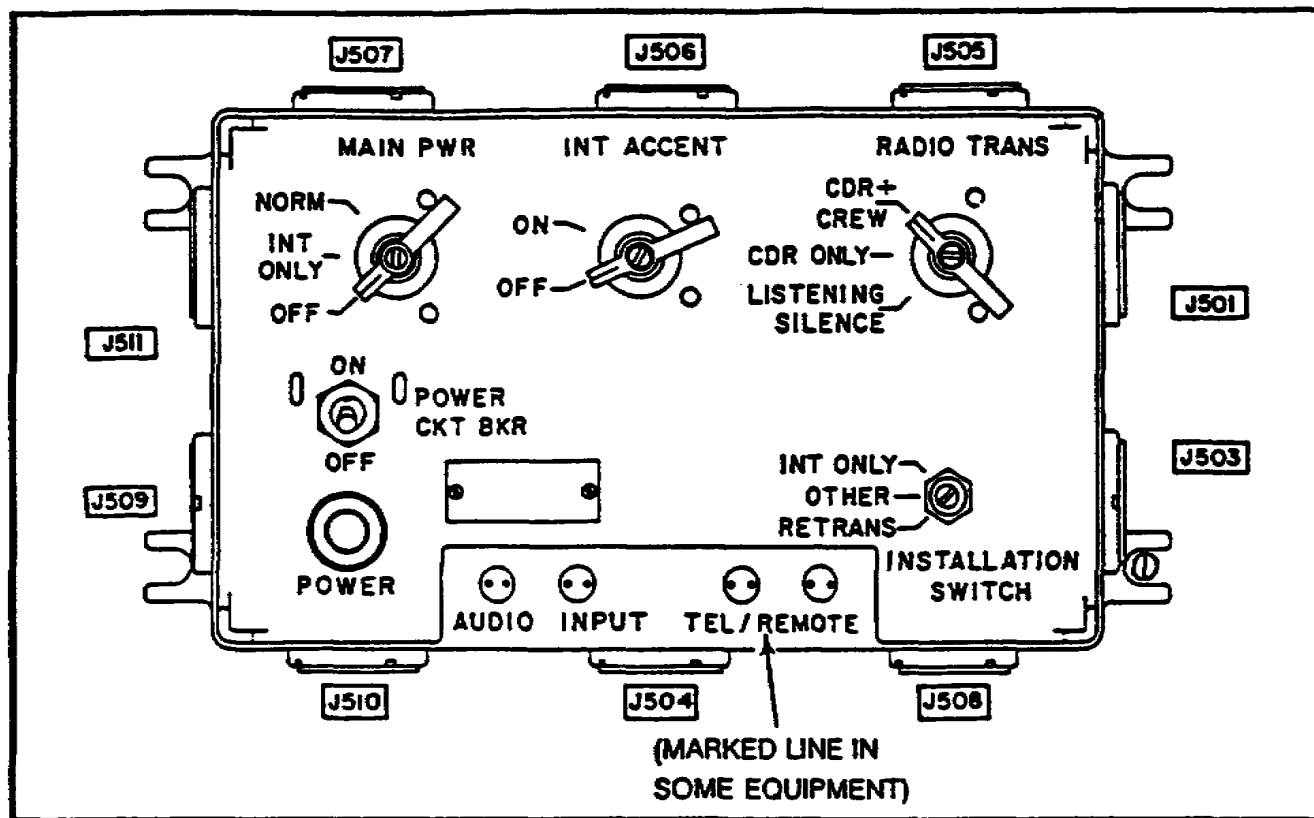


Figure 2. AM-1780/VRC jacks, control, and indicator.

g. See Figure 3. The C-2298/VRC is a control device (box) located at each crew member position. The C-2298 amplifies the voice signals from the microphone and controls the volume to the audio accessory earphone(s). The two jacks J802 and J803, located on the bottom of the C-2298, provide a connection for the audio accessory. The two jacks J801 and J804, located on the left and right sides of the C-2298, provide a connecting point for the interconnecting cable CX-4723 from the AM-1780 and for connecting an additional C-2298 in tandem. A volume control is located between jacks J802 and J803. The MONITOR switch is located on the face (front) of the C-2298.

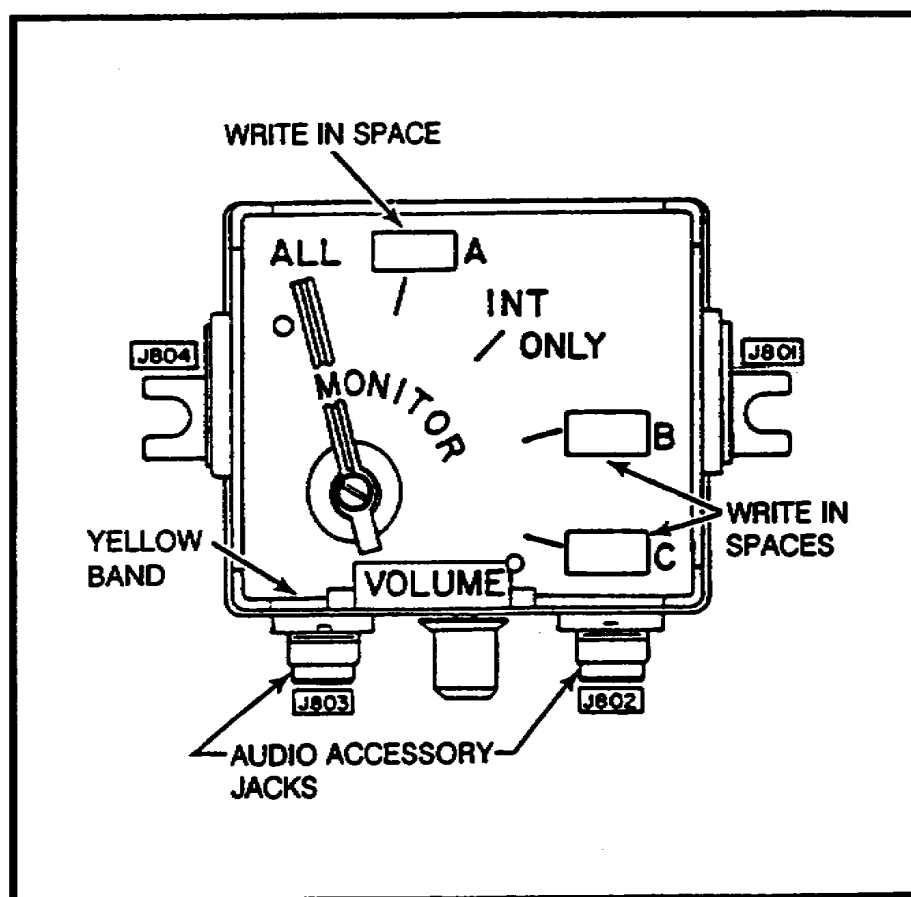


Figure 3. C-2298 jacks and controls.

h. See Figure 4. Cable assemblies CX-4720/VRC and CX-13089/VRC provide connection between the DC power source and the AM-1780/VRC, depending on the vehicle installation. The CX-4720/VRC is used when terminated in terminal lugs. When issued with Bendix connector assembly, cable is type CX- 13089/VRC.

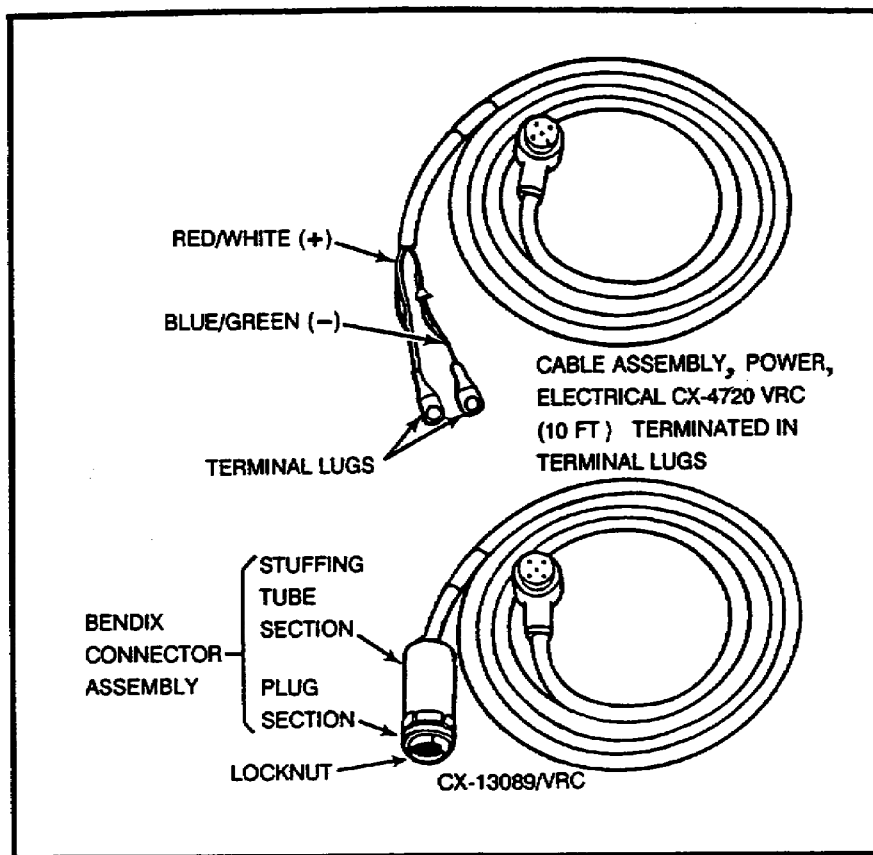


Figure 4. Cable assemblies.

- i. See Figure 5. Cable assembly CX-4723/VRC provides a connection between the AM-1780/VRC and each crew member's C-2298/VRC.

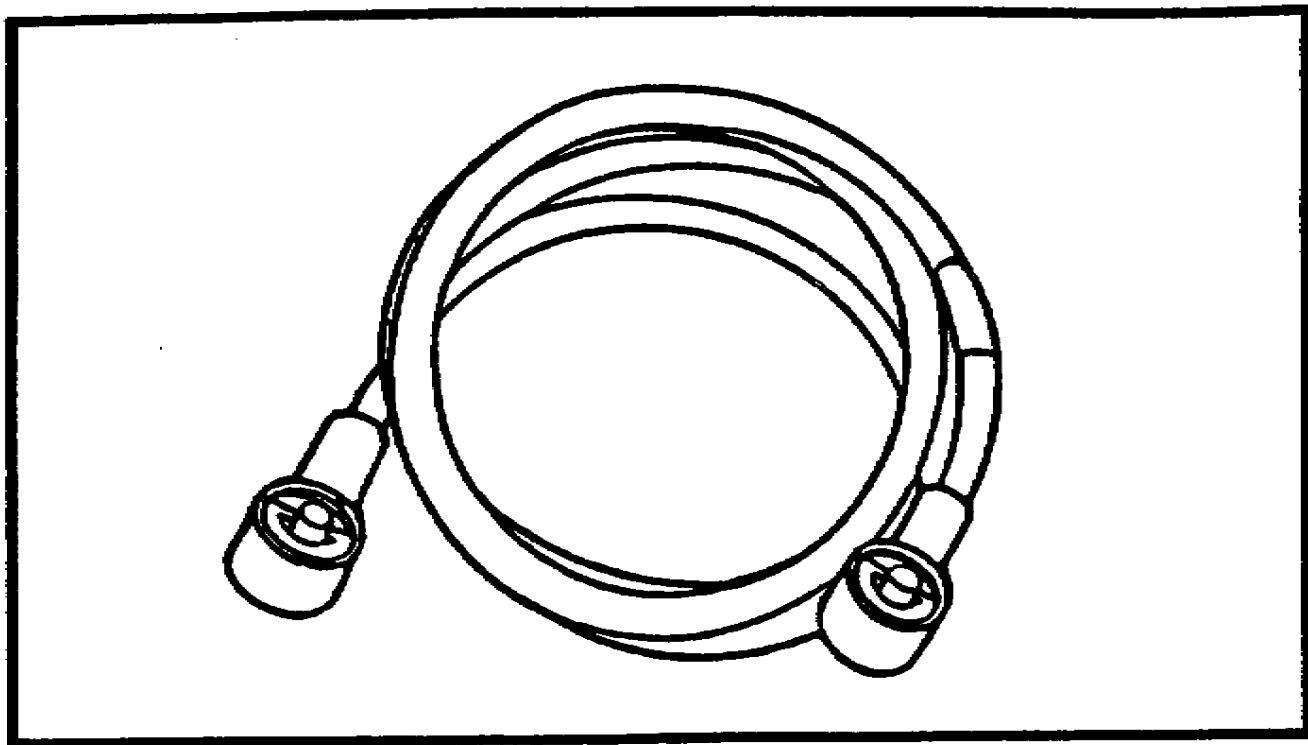


Figure 5. Cable assembly CX-4723/VRC.

j. See Figure 6. Typical audio accessories used with the intercom AN/VIC-1(V) include the microphone, dynamic M-80/U; headset H-251/U; headset-microphone H-161/U; and handsets H-189/GR or H-250/U (not shown).

NOTE:

IN SOME INSTALLATIONS, CX-8650/GR MAY BE REPLACED BY RETRACTILE CORD ASSEMBLY CX-10766/GR (25-FOOT EXTENSION) OR CX-10767/GR (25-FOOT EXTENSION).

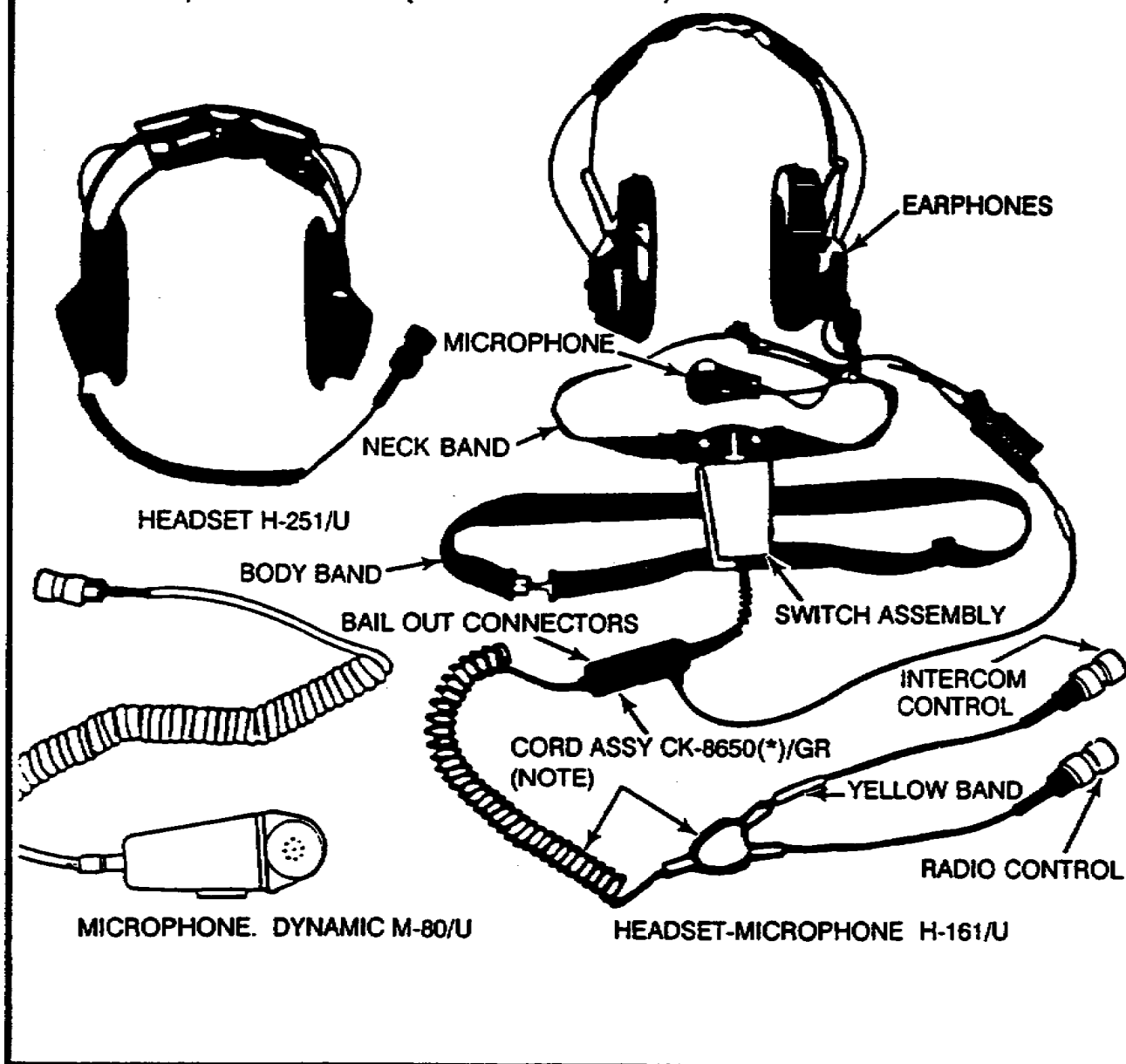


Figure 6. Typical audio accessories used with AN/VIC-1(V) control boxes.

k. See Figure 7. Audio accessories normally used by combat vehicle and armored vehicle crew members are the CVC helmet, type T56-6, and the AVC helmet, type DH-132.

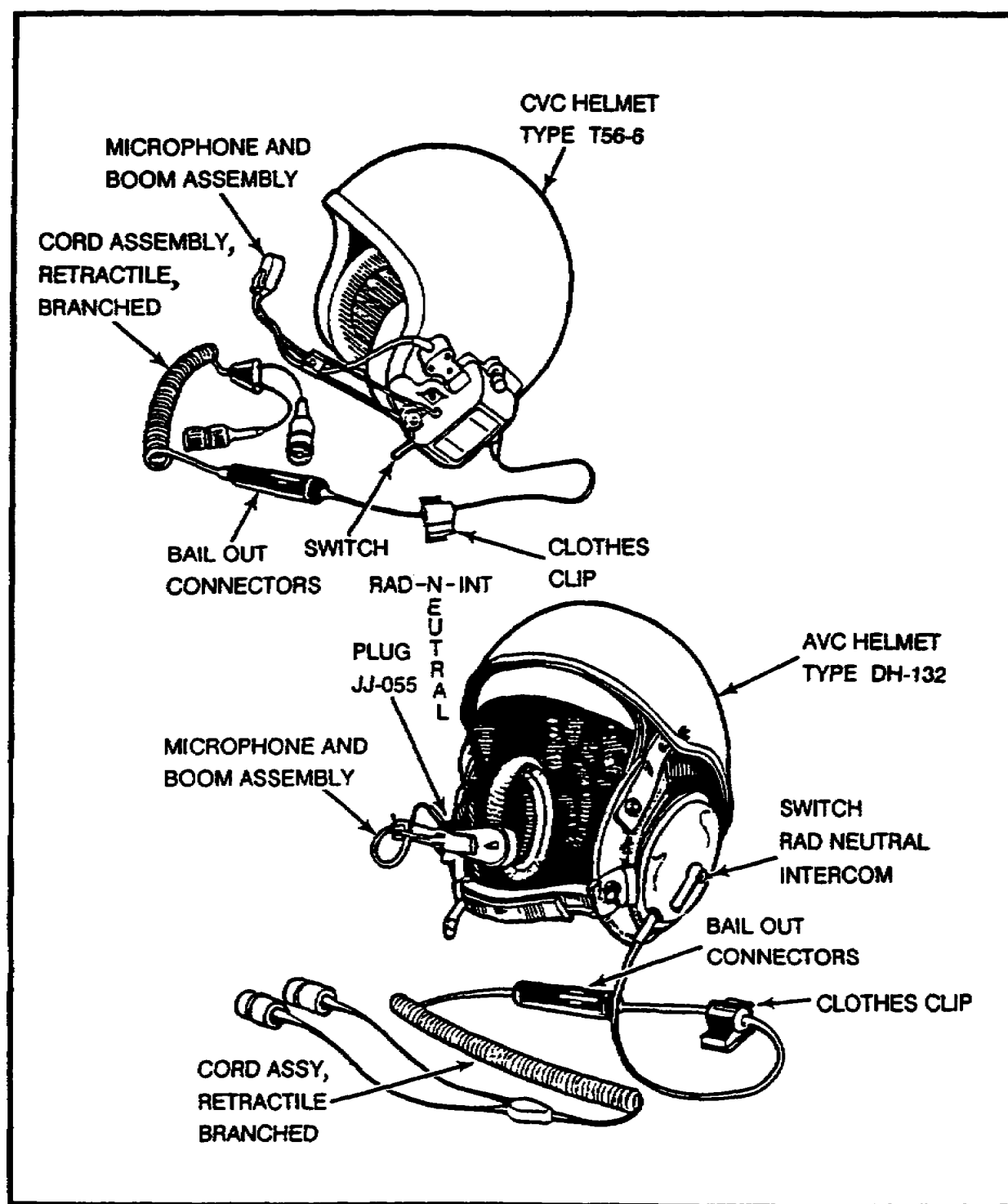


Figure 7. CVC helmet (T56-6) and AVC helmet (DH-132).

1. See Figure 8. First, let's identify the jacks and their use on the AM-1780. Jack J501 (A) provides power and audio and control interface signals from the A-RT (receiver-transmitter) when used with radio. Jack J503 (B) provides audio signals and controls interface signals from the C-RT (receiver-transmitter) when used with radio. Jacks J509 and J511 (C) provide connections

for a retransmission control box for certain radio installations. Jack J510 (D) provides connection of audio signals for a B receiver. Jack J504 (E) provides intercom and radio Interface to the commander's control box. The commander's C-2298 is independent of all other control boxes. The commander's control box cable CX-4723 should always be connected to J504. Jacks J505, J506, and J507 (F) provide intercom and radio interface to each crew member control box. Jack J508 (G) provides input power to the AM-1780 when radios are not used. Audio input Ending posts (H) provide connection of an additional receiver when used with radio. TEL/REMOTE(line) binding posts (I) provide a connection for a field telephone, switchboard, or another intercom to the intercom system.

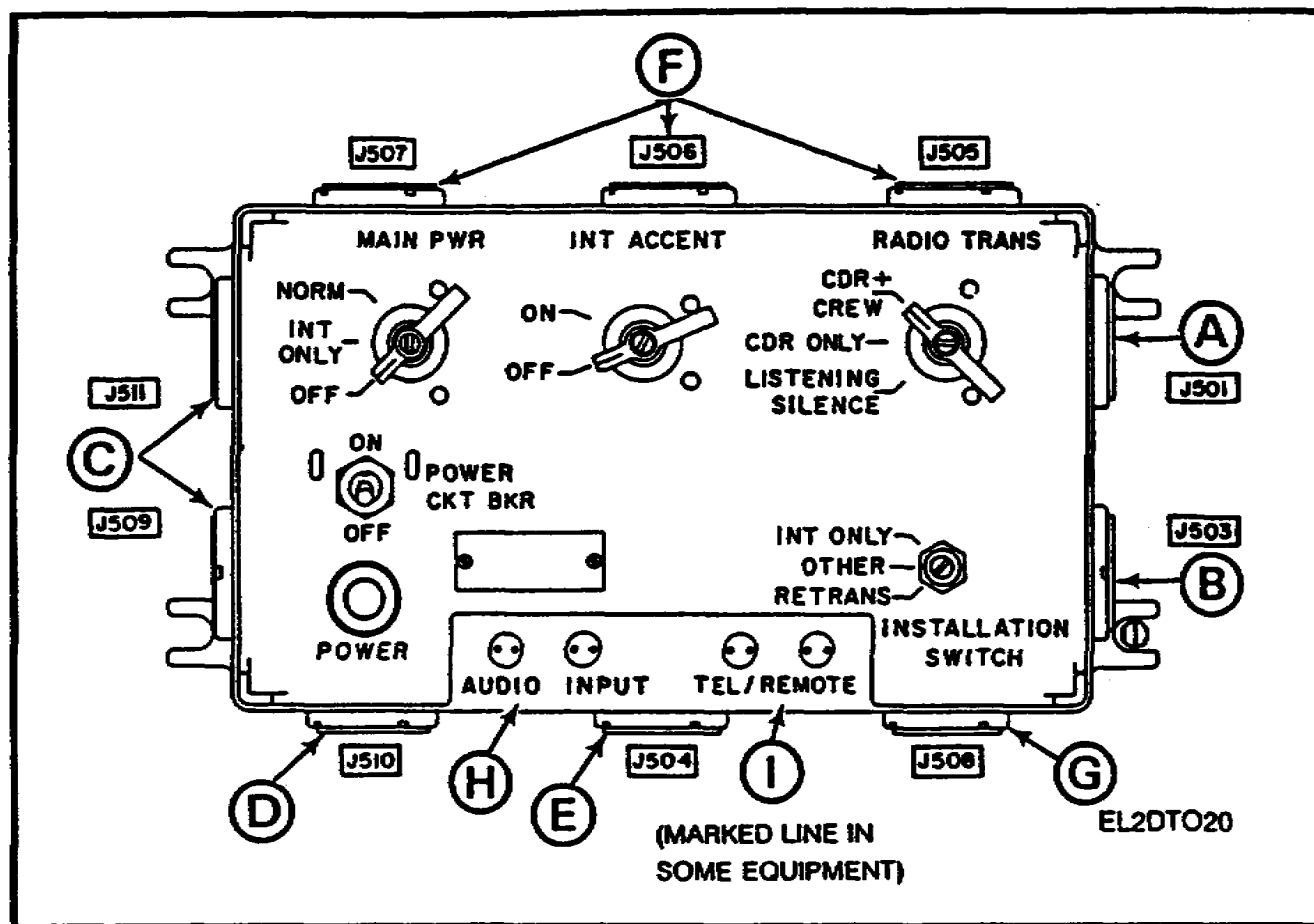


Figure 8. AM-1780 jacks and binding post locations.

m. See Figure 9, AM-1780 controls and their functions. The INSTALLATION SWITCH (A) in the RETRANS position provides for radio relay operations. The OTHER position provides power and controls signals when the intercom is used with radio. The INT ONLY position provides DC power input through jack J508 when the intercom is not used with radio. The POWER CKT BKR switch (B) provides overload protection and controls DC power input for the intercom set. The POWER lamp (C) indicates when power is or is not being applied to the system. The MAIN PWR switch (D) OFF position removes the DC input power from the system. The INT ONLY position applies power to the intercom only. The NORM position provides power to the intercom and radio set when radio is used with intercom. In the LISTENING SILENCE position of the RADIO TRANS switch (E), no crew member can key (transmit on) the radio through the



n. See Figure 10, C-2298/VRC jacks and controls. Jacks J801 and J804 (A) provide a connecting point for interconnecting cable CX-4723, which provides operating voltage and a signal path to the C-2298/VRC. Jacks J801 and J804 are wired in parallel, and another control box can be connected in tandem. Jack J802 (RAD)(B) provides for a connection of an audio accessory. Jack J802 is used to key, talk, and listen on either the intercom or radio, depending on the setting of the MONITOR switch. Jack J803 (INT) (C), marked with a yellow band, provides a connection for an audio accessory. When jack J803 is used, key, talk, and listen only for the intercom is available in all positions of the MONITOR switch except C. The MONITOR switch (D) provides the selection of the different radios and the intercom. The VOLUME-control (E) adjusts the level of the audio signal being applied to the audio accessory jacks.

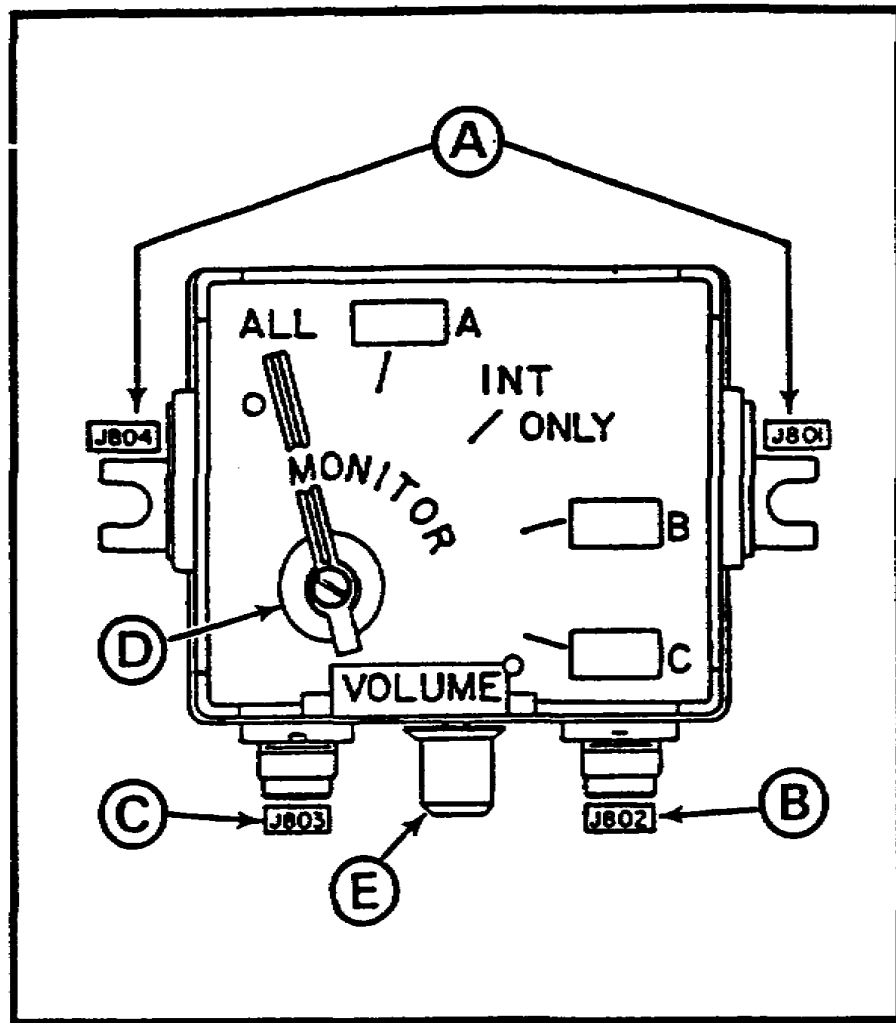


Figure 10. C-2298/VRC jacks and control locations.

o. See Figure 11, connection of audio accessories to C-2298 control box jacks. Scan Figure 11 before going on.

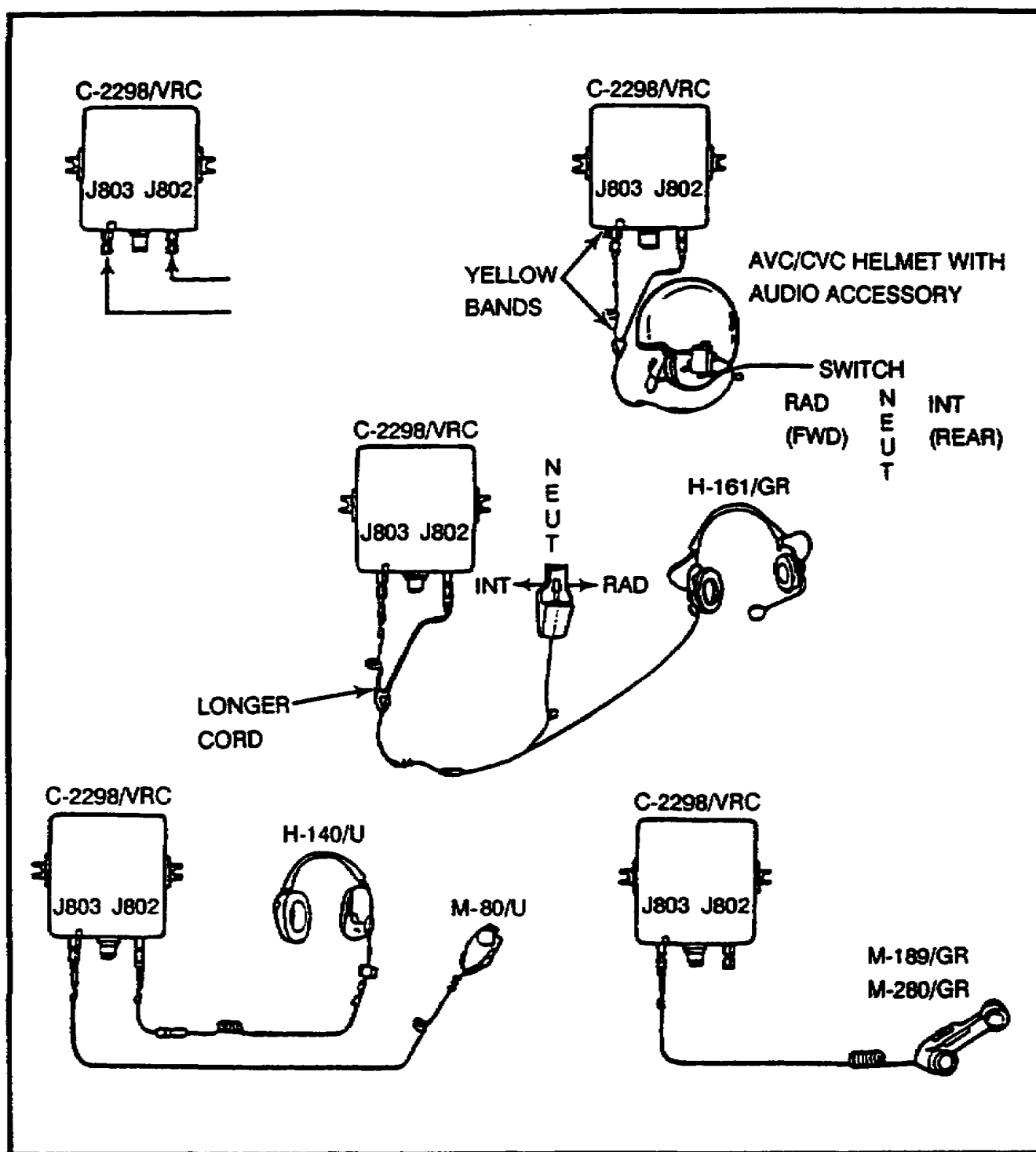


Figure 11. Typical connections of audio accessories to control boxes.

p. See Figure 12. To ease the connection of the audio accessory plug to the component audio jack, put a light coating of silicone grease on the audio accessory plug O ring. When connecting the audio accessory plug to the audio jack on the component, position the flat side of the plug at the top of the audio jack, push in on the plug, and turn it clockwise until the plug locks onto the jack.

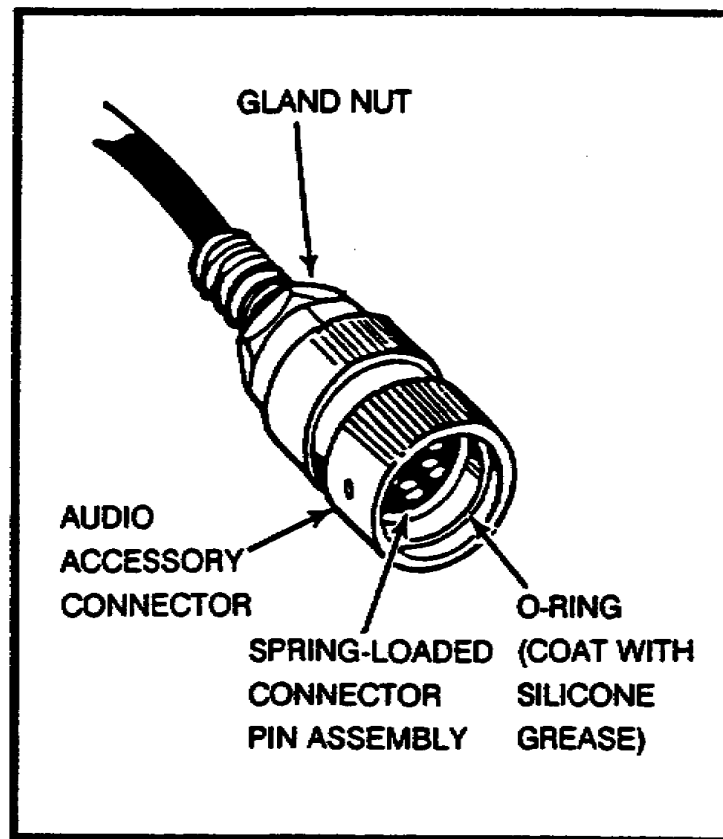


Figure 12. Audio accessory connector.

q. See Figure 13. Before going on, let's look at how the intercom controls should be preset. First, the setting of the controls of the AM-1780:

- (A) MAIN PWR switch to INT ONLY.
- (B) POWER CKT BKR to ON.
- (C) INT ACCENT to OFF.
- (D) RADIO TRANS switch to any of its three positions: CDR+CREW, CDR ONLY, or LISTENING SILENCE.
- (E) INSTALLATION SWITCH to INT ONLY.
- (F) POWER lamp lens cover CCW to STOP.

Second, the setting of the controls of the C-2298:

- (G) MONITOR switch to INT ONLY.
- (H) VOLUME to a comfortable listening level.

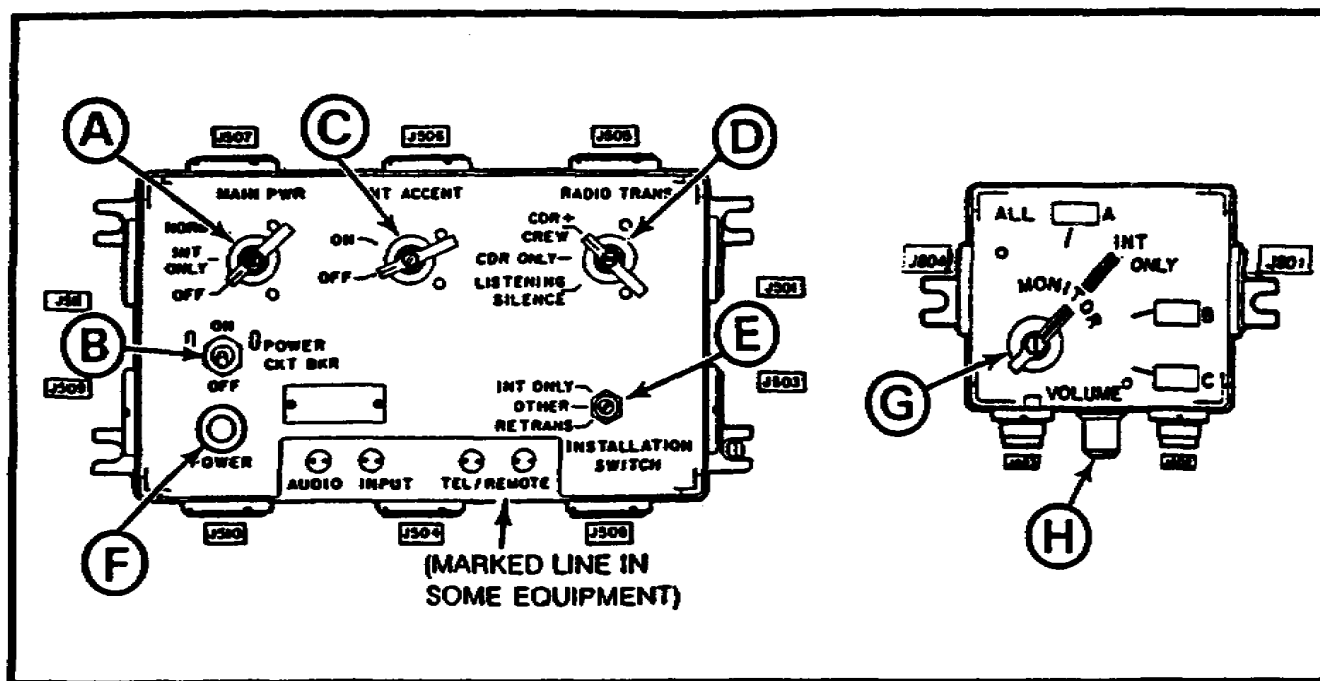


Figure 13. AM-1780 and C-2298 controls set for intercom operation.

r. See Figure 14. When cabling the intercom for operation, the power cable is connected to jack J508 on the AM-1780. The commander's C-2298 control box will be connected to jack J504 on the AM-1780. The crew member's C-2298 control boxes will be connected to jacks J505, J506, and J507 on the AM-1780. The audio accessories will be connected to jacks J803 and/or J803 and J802.

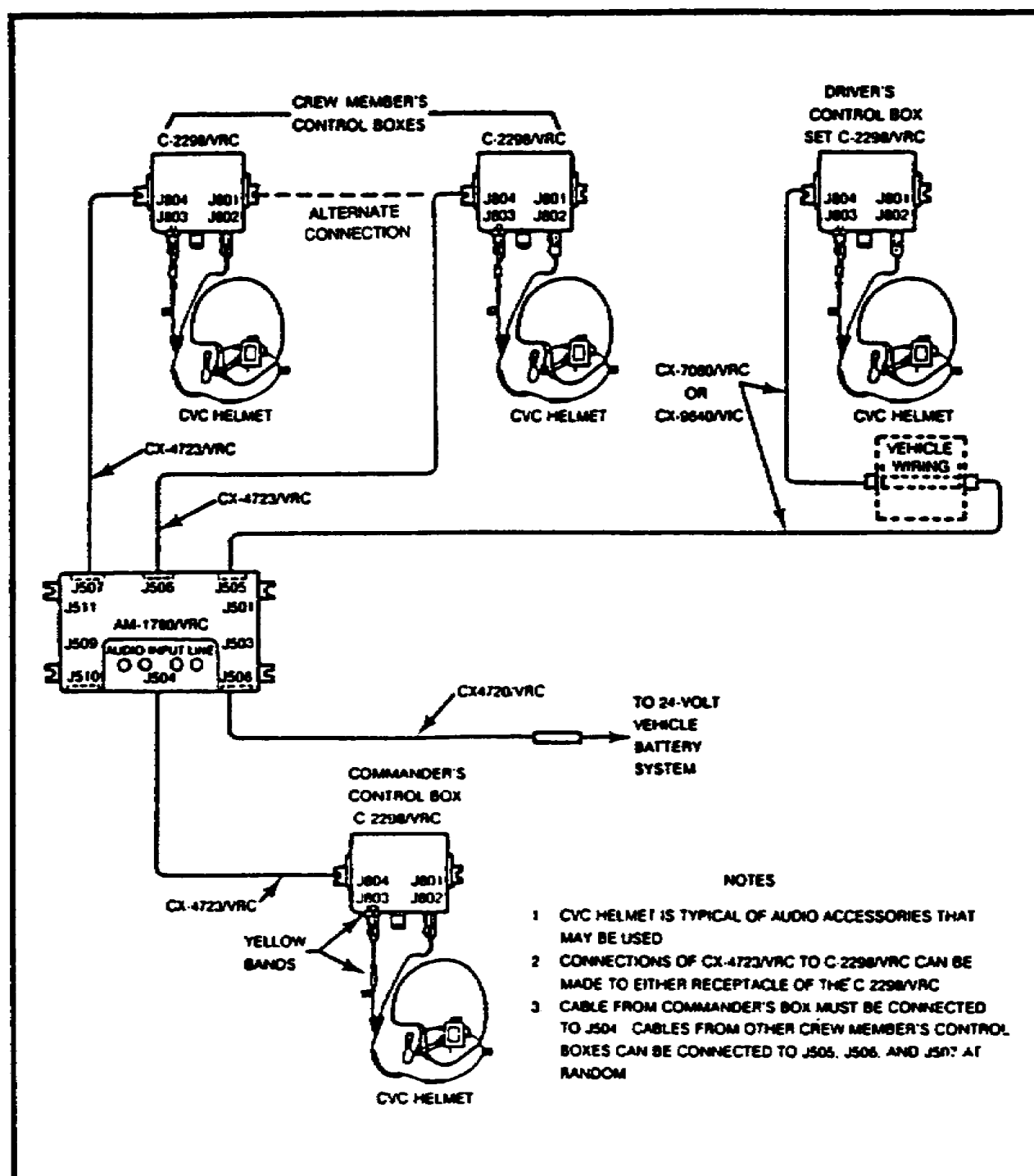


Figure 14. Typical AN/VIC-1(V) cabling for intercom operation.

3. DA FORM 2404. See Figure 15. Before evaluating the operation of the intercom set, the unit-level communications maintainer must complete the administrative section, blocks 1 through 7, of DA Form 2404. The performance section, blocks 8 through 10, is completed by the unit-level communications maintainer and his supervisor after the action section is completed. The action section, columns a, b, c, d, and e, is completed during checks and/or repairs.

EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET									
For use of this form, see TM 38-750; the proponent agency is the Office of the Deputy Chief of Staff for Logistics.									
1. ORGANIZATION					2. NOMENCLATURE AND MODEL				
3. REGISTRATION/SERIAL/NSN			4a. MILES	5. HOURS	6. ROUNDS FIRED	7. HOT STARTS	8. DATE	9. TYPE INSPECTION	
7. APPLICABLE REFERENCE									
TM NUMBER			TM DATE		TM NUMBER			TM DATE	
COLUMN a — Enter TM item number.					COLUMN d — Show corrective action for deficiency or shortcoming listed in Column c.				
COLUMN b — Enter the applicable condition status symbol.					COLUMN e — Individual ascertaining completed corrective action initial in this column.				
COLUMN c — Enter deficiencies and shortcomings.									
STATUS SYMBOLS									
<p>"X"—Indicates a deficiency in the equipment that places it in an inoperable status.</p> <p>CIRCLED "X"—Indicates a deficiency, however, the equipment may be operated under specific limitations as directed by higher authority or as prescribed locally, until corrective action can be accomplished.</p> <p>HORIZONTAL DASH "—"—Indicates that a required inspection, component replacement, maintenance operation check, or test flight is due but has not been accomplished, or an overdue MWO has not been accomplished.</p>					<p>DIAGONAL "/"—Indicates a materiel defect other than a deficiency which must be corrected to increase deficiency or to make the item completely serviceable.</p> <p>LAST NAME INITIAL IN BLACK, BLUE-BLACK INK, OR PENCIL—Indicates that a completely satisfactory condition exists.</p> <p>FOR AIRCRAFT—Status symbols will be recorded in red.</p>				
ALL INSPECTIONS AND EQUIPMENT CONDITIONS RECORDED ON THIS FORM HAVE BEEN DETERMINED IN ACCORDANCE WITH DIAGNOSTIC PROCEDURES AND STANDARDS IN THE TM CITED HEREON.									
8a. SIGNATURE (Person(s) performing inspection)			8b. TIME		9a. SIGNATURE (Maintenance Supervisor)			9b. TIME	
								10. MANHOURS REQUIRED	
TM ITEM NO.	STATUS	DEFICIENCIES AND SHORTCOMINGS			CORRECTIVE ACTION			INITIAL WHEN CORRECTED	
a	b	c			d			e	

SAMPLE

DA FORM 2404
1 APR 75

Replaces edition of 1 Jan 64, which will be used

Figure 15. DA Form 2404.

4. OP CHECK FOR INTERCOMMUNICATION SET AN/VIC-1 WITHOUT RADIO.

a. Refer to GTA 11-3-49, December 1986. This graphic training aid (GTA) is a systems check which provides a step-by-step procedure for evaluating the performance of intercommunication set AN/VIC-1 (without radio). It specifies the procedure to be used to evaluate the operational state of the intercom set components and/or items of equipment within the system.

b. This op check is divided into two sections. Section I lists specific preparatory actions that establish a starting condition. Section II is the equipment performance checklist (EPC). The EPC steps are specifically arranged and must be done in the order presented. Each step checks a specific function. It tells you the action you must take to check that function and the normal

indication you should observe. If a step contains more than one action, complete all of the actions within the step before proceeding. The directions at the end of an EPC step must be completed before going to the next EPC step. If abnormal indications are observed for any EPC step, reference the step when: completing columns a and c of the DA Form 2404. Throughout GTA 11-3-49 are cautions, warnings, and directions that must be observed and followed for personnel and equipment safety as well as for an accurate evaluation of all the intercom set functions.

c. See the preparatory actions in Section I, GTA 11-3-49 (Figure 16).

(1) Initial adjustments. The first action in a logical sequence for checking the operation of an intercom set is making the initial adjustments. This includes preparatory actions before power is applied.

SECTION I
PREPARATORY ACTIONS

1. INITIAL ADJUSTMENT

The first action in a logical sequence for checking the operation of an intercom set is making the initial adjustments. This includes preparatory actions before power is applied.

WARNING

TO SAFEGUARD AGAINST ELECTRICAL SHOCK AND POSSIBLE DAMAGE TO EQUIPMENT, REMOVE OR TAPE ALL PERSONAL EXPOSED METAL OBJECTS (E.G. DOG TAGS, WATCHES, RINGS, AND MEDALLIONS).

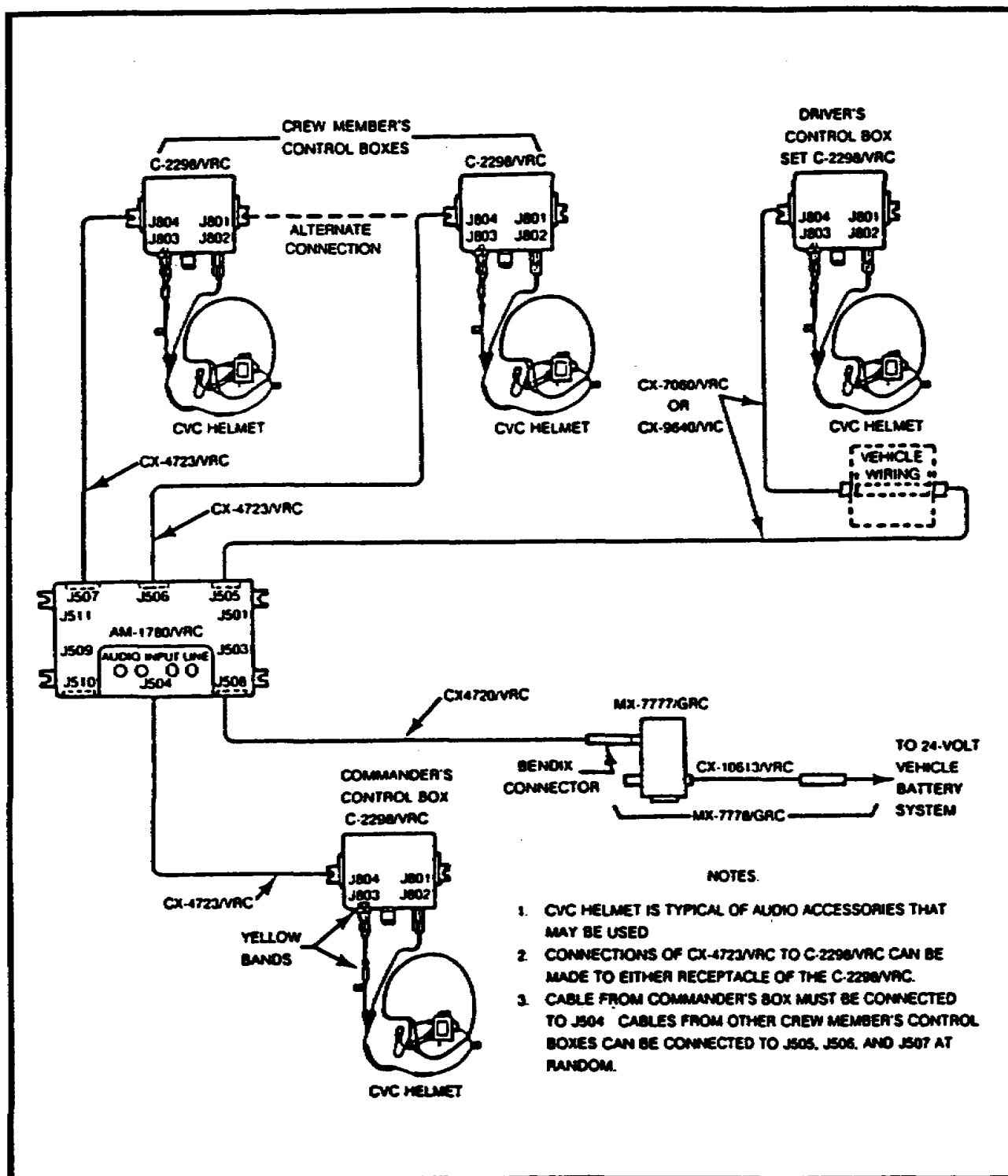
CAUTION

Do not start the vehicle engine with the communication system turned on. Starting a vehicle engine with the communication system on can cause serious damage to its components.

- a. Set vehicle MASTER POWER switch(es) (hull and turret) to OFF.
- b. Set MX-7777 circuit breaker and BATTLE OVERRIDE switches to off.
- c. Set AM-1780 POWER CKT BKR to OFF.
- d. Turn MAIN PWR switch to OFF.

Figure 16. Initial adjustments, Section I of GTA 11-3-49.

(2) See Figure 17. Item 2 of the GTA 11-3-49 instructions is to check the intercom for correctness of installation. This is also a preparatory action. If any errors are found when checking the intercom installation, they must be corrected before going on.



(3) Preset controls. Presetting the intercom component controls is critical and must be performed accurately to obtain a valid evaluation.

(a) AM-1780. See Figure 18. Open the POWER lamp lens cover (A) (turn counterclockwise [CCW] to stop), and turn the INSTALLATION SWITCH (B) to INT ONLY.

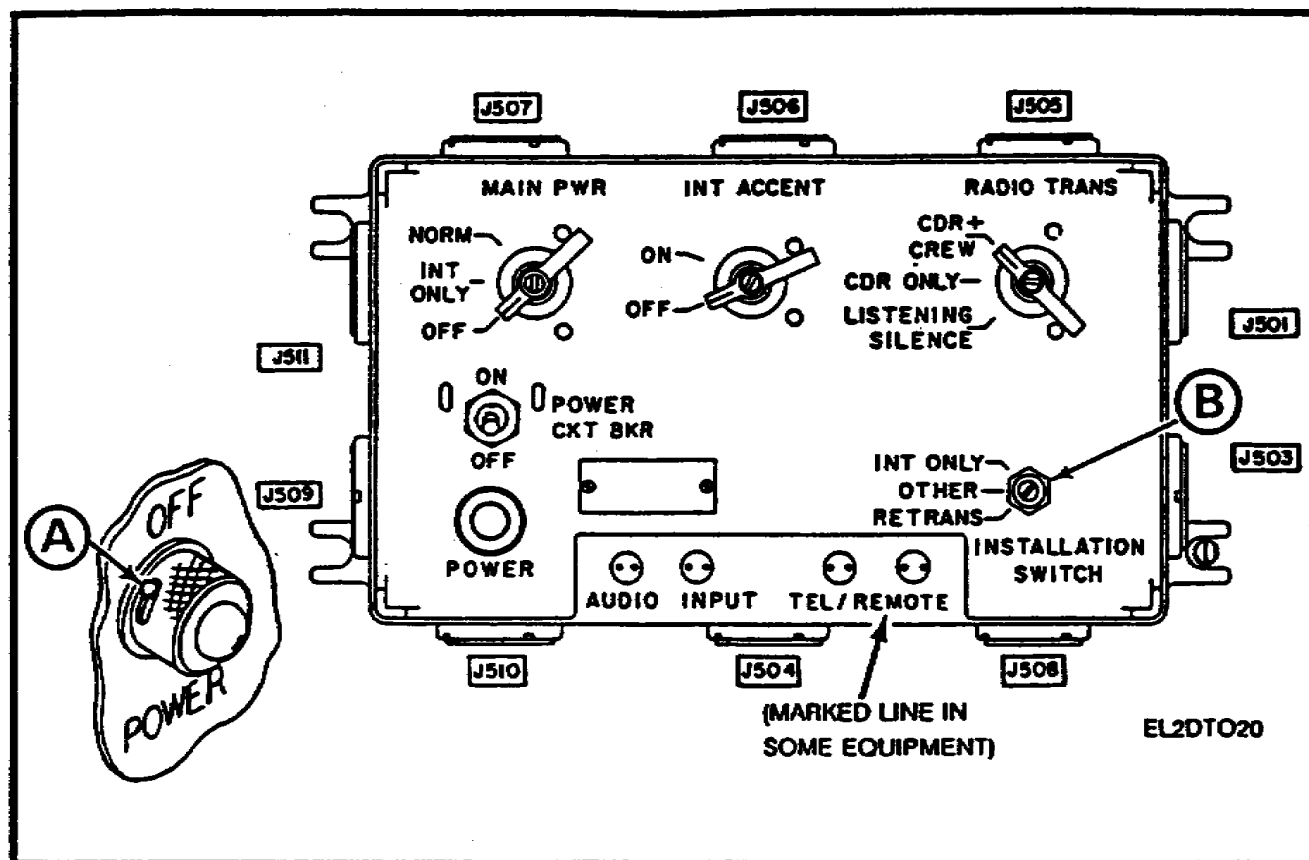


Figure 18. AM-1780.

(b) Control box C-2298. See Figure 19. Turn the VOLUME control (A) fully clockwise (CW)(maximum), and turn the MONITOR switch (B) to ALL.

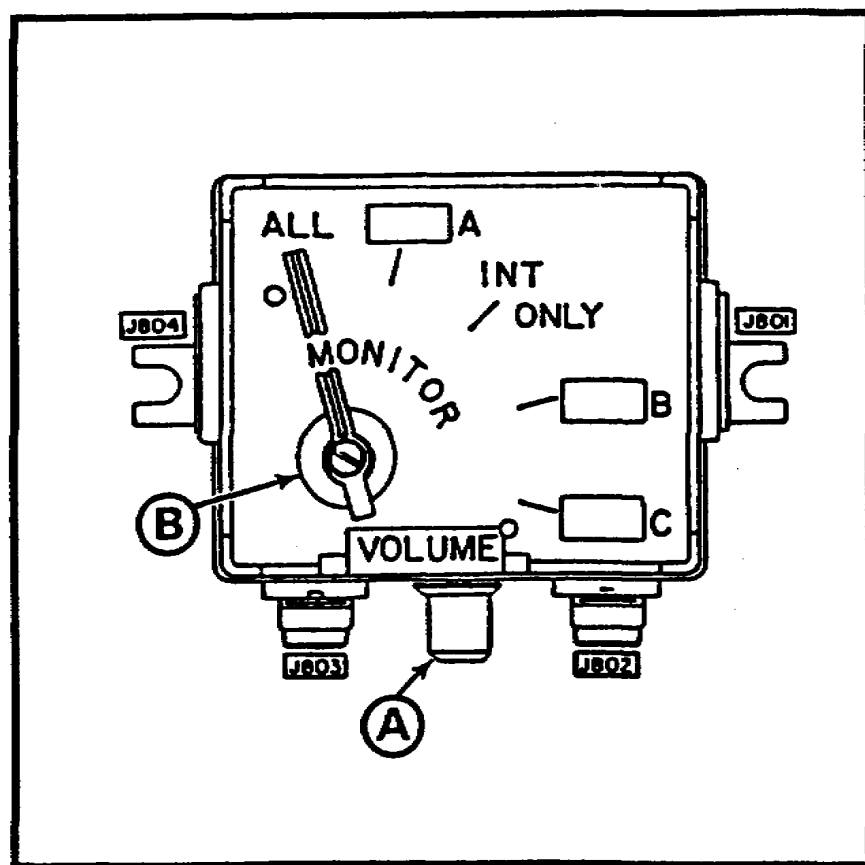


Figure 19. C-2298 VOLUME control and MONITOR switch.

- NOTES: 1. Instead of crew person audio accessories (AVC, CVC, or H-161/U), a handset (H-189 or H-250) may be used to initially check the operation of the intercom set. (Reference made to handset means audio accessory.) Make sure the handset is good and its audio plug contacts are clean.
2. Before connecting cables and audio accessories to components of the intercom set, make sure that all plug and jack contacts and pins are clean and undamaged. After connecting, ensure that the connections are tight.

d. Verify operation of handset H-189/U (H-250U). See Figure 20. To verify that the handset H-189/U (H-250/U) is good, make the following checks using test set AN/PSM-45:

(1) Phone element check. Set up test set for ohms checks and circuit disturb between pins A and B by placing one test meter lead on pin A and tapping pin B with the other test lead. A clicking sound should be heard from the phone element if it is good.

(2) Keying circuit check. Connect one meter test lead to pin A, and place the other meter test lead on pin C of the handset audio plug. With the handset PUSH-TO-TALK (PTT) switch held in, the meter display should show 0

ohms if the circuit is good. With the handset PTT switch released, the meter display should show infinite (∞) ohms if the circuit is good.

(3) Microphone element check. Connect one meter test lead to pin A and the other test lead to pin D of the handset audio plug. While listening to the microphone element (hold to your ear), press and release the PTT switch several times. A clicking sound should be heard from the microphone element if it is good.

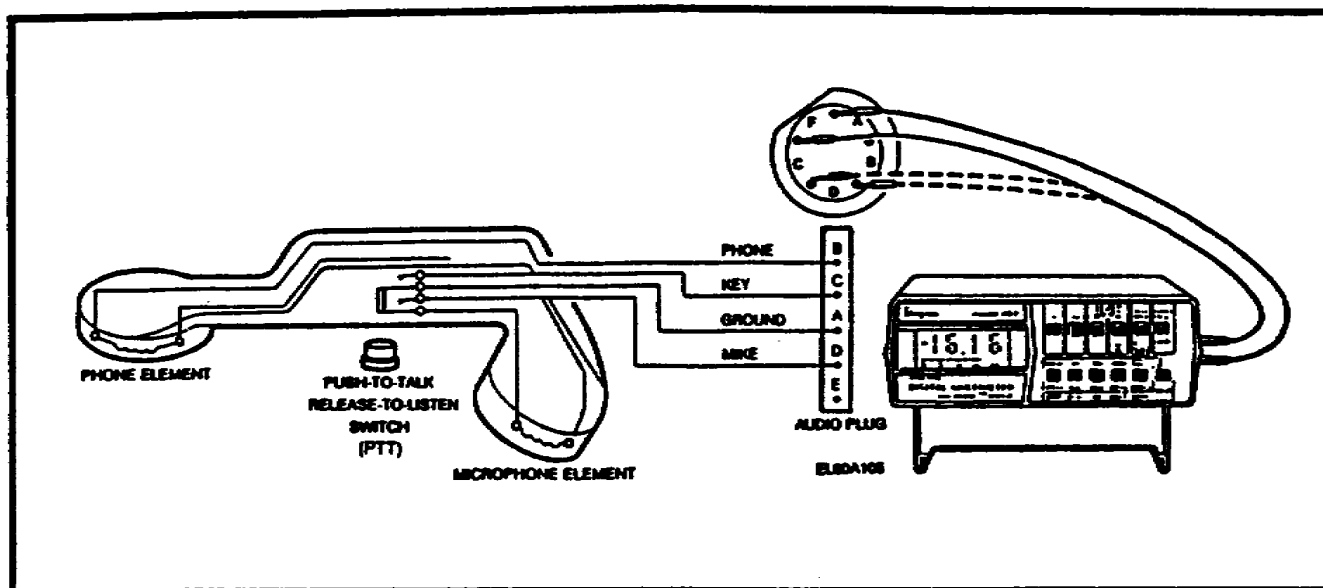


Figure 20. H-189/U(H-250/U) handset checks.

5. EQUIPMENT PERFORMANCE CHECK. Section II of GTA 11-3-49 is the equipment performance checklist that will be used to verify if the installed AN/VIC-1(V) is operating correctly or not. Portions of that EPC are shown in the following paragraphs.

a. EPC step 1. First, turn the vehicle MASTER power SWITCH to ON.

(1) Refer to Figure 21, since EPC step 1a checks the vehicle power.

SECTION II
EQUIPMENT PERFORMANCE CHECKLIST

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
1	Intercom input power.	a. Set vehicle MASTER power SWITCH to ON.	a. Vehicle master POWER lamp(s) lights.

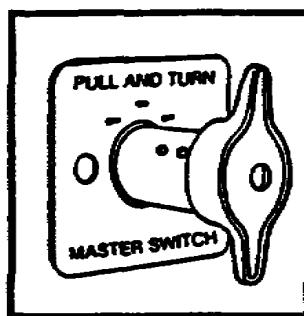


Figure 21. EPC step 1a and vehicle MASTER SWITCH set at ON.

If step 1a is good, the vehicle master POWER lamp(s) will light. Step 1b would then be checked.

(2) See Figure 22. EPC step 1b checks the MX-7777 circuit breaker function.

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
		b. Set MX-7777 circuit breaker to ON.	b. MX-7777 circuit breaker stays on.

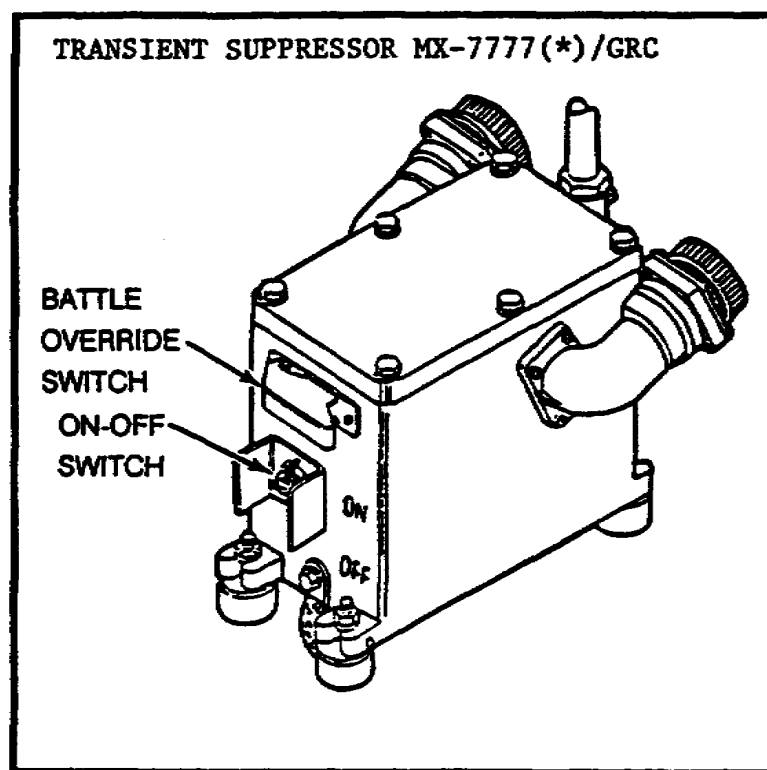


Figure 22. EPC step 1b and MX-7777 circuit breaker set to ON.

If the MCX-7777 circuit breaker stays in the ON position, this part of EPC step 1 (1b) is good. Step 1c would be checked.

(3) See Figure 23. EPC Step 1c checks the AM-1780 MAIN PWR switch function when set at INT ONLY.

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
		c. Turn AM-1780 MAIN PWR to INT ONLY.	c. AM-1780 POWER lamp does <u>not</u> light.

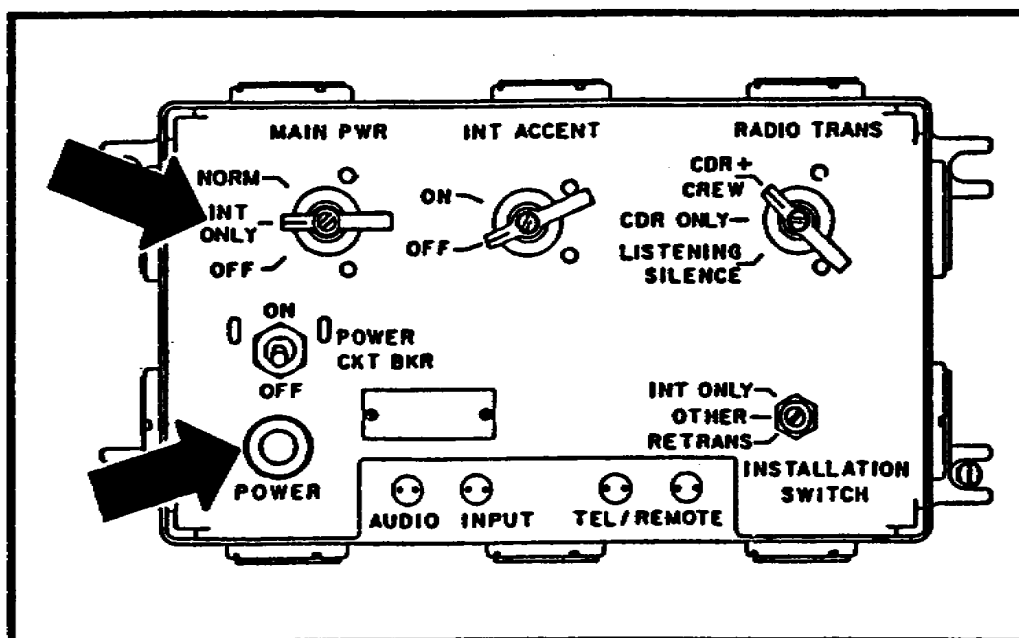


Figure 23. AM-1780 MAIN PWR switch at INT ONLY, POWER lamp not lit.

If step 1c checks good, step 1d would be checked.

- (4) See Figure 24. EPC step 1d checks the AM-1780 POWER CKT BKR function.

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
		d. Set AM-1780 POWER CKT BKR switch to ON.	d. AM-1780 POWER CKT BKR stays on, and POWER lamp lights.

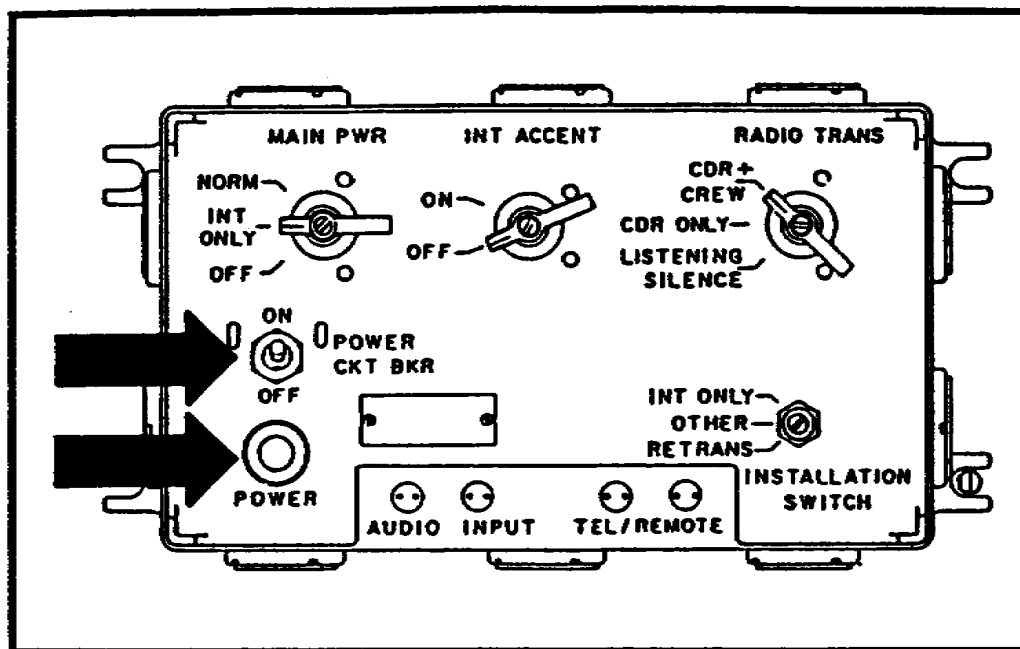


Figure 24. AM-1780 POWER CKT BKR set at ON and AM-1780 POWER lamp lights.

If step 1d checks good, then all of EPC step 1 is good, and EPC step 2 would be checked.

DIRECTIONS

Before doing EPC step 2, connect the known good handset to jack J803 on the commander's C-2298 control box. See Figure 25.

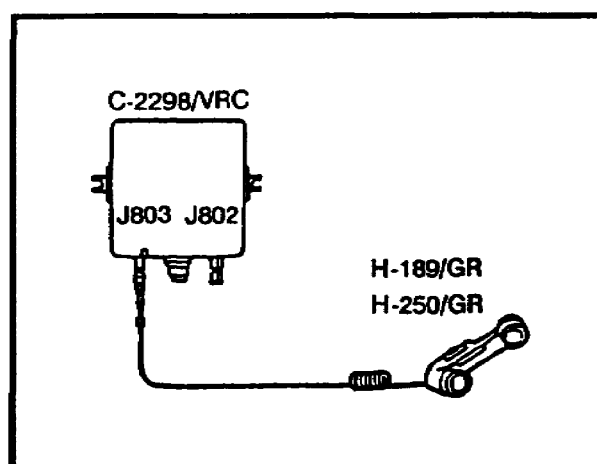


Figure 25. Handset connected to commander's C-2298 intercom jack J803.

b. EPC step 2.

(1) Do the following to check step 2a:

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
2	Commander's control box C-2298.	At commander's box C-2298:	For each position of C-2298 MONITOR switch:
	a. Intercom keying.	a. Press and hold key switch on handset.	a. AM-1780 relays click (key).

If, when step 2a is checked, relays inside the AM-1780 click, step 2a is good and step 2b would be checked.

(2) Step 2b checks the commander's intercom talk/listen circuit operation.

NOTE: Sidetone loudness depends on the commander's control box VOLUME control setting. Check first at full volume; then adjust the VOLUME control to a comfortable listening level.

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
	b. Intercom talk/listen.	b. Speak into mike.	b. Voice sidetone is heard in earphone.

(Release the key switch on the handset before going on.)

If step 2b checks good, step 2c would be checked.

DIRECTIONS

Before checking step 2c, move the handset from jack J803 to jack J802 on the commander's C-2298; then set the commander's C-2298 MONITOR switch to INT ONLY. (See Figure 26.)

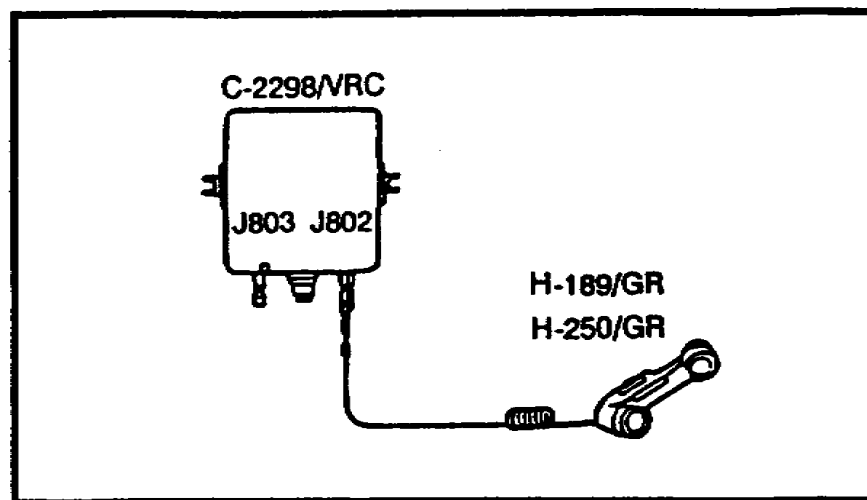


Figure 26. Handset connected to C-2298 RAD jack J802.

STEP NUMBER	FUNCTION CHECKED	ACTION	NORMAL INDICATION
c.	INT ONLY keying, talk/listen.	c. Press and hold key switch on hand- set, and speak into mike.	c. AM-1780 relays click and voice side- tone is heard in earphone.
(Release the key switch on the handset before going on.)			

If step 2 checks good, step 3 would be checked.

DIRECTIONS

When the installation has crew member box(es) C-2298, one at a time, check each crew member's intercom according to EPC step 3.

- First, move the handset from the commander's C-2298 to jack J803 of the crew member's C-2298 being checked.
- Then, turn the crew member's box C-2298 VOLUME control fully clockwise (maximum).

NOTE: Sidetone loudness depends on the control box C-2298 VOLUME control setting. Check first at full volume; then adjust the volume control to a comfortable listening level.

c. EPC step 3. This step checks the crew member's C-2298 control box function.

(1) To check step 3a, do the following:

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
3	Crew member's control box C-2298.	At each crew member box:	For each position of MONITOR switch except position C:
	a. Intercom keying.	a. Press and hold key switch on handset.	a. AM-1780 relays click.

(2) If step 3a checks good, do step 3b as follows:

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
	b. Intercom talk/listen.	b. Speak into mike.	b. Voice sidetone is heard in earphone.

(Release the key switch on the handset before going on.)

(3) If step 3b checks good, step 3c would be checked as follows:

DIRECTIONS

Move the handset to the RAD jack (J802) on the C-2298 being checked, and turn the C-2298 MONITOR switch to INT ONLY; then do step 3c as follows.

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
	c. INT ONLY keying, talk/listen.	c. Press and hold key switch on handset, and speak into mike.	c. AM-1780 relays click and voice side-tone is heard in earphone.

(Release the key switch on the handset before going on.)

If step 3 checks good, check EPC step 4.

DIRECTIONS

Move the handset to the driver's control box C-2298 INT jack J803 (yellow band); then, turn the driver's control box VOLUME control fully clockwise (maximum).

NOTE: Sidetone loudness depends on the control box VOLUME setting. Check first at full volume; then adjust the VOLUME control to a comfortable listening level.

In self-propelled howitzers, the driver's control box will work only when the control box MONITOR switch is set to the ALL position.

d. EPC step 4. This step checks the driver's C-2298 control box operation.

(1) Check step 4a as follows:

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
4	Driver's control box C-2298.	At driver's box:	For each position of MONITOR switch except position C:
	a. Intercom keying.	a. Press and hold key switch on handset.	a. AM-1780 relays click.

(2) If step 4a checks good, do step 4b, as follows:

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
	b. Intercom talk/listen.	b. Speak into mike.	b. Voice sidetone is heard in earphone.

(Release the key switch on the handset before going on.)

(3) If step 4b checks good, do step 4c.

DIRECTIONS

Before checking step 4c, move the handset to the driver's control box RAD jack J802, and turn his C-2298 MONITOR switch to INT ONLY, then proceed to step 4c.

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
	c. INT ONLY key, talk/listen.	c. Press and hold key switch on handset, and speak into mike.	c. AM-1780 relays click and voice sidetone is heard in earphone.

(Release the key switch on the handset before going on.)

If step 4 checks good, do EPC step 5.

DIRECTIONS

One at a time, connect and check each audio accessory at its appropriate control box. Set the control box MONITOR switch to INT ONLY, and turn VOLUME control to full volume (maximum).

e. EPC step 5. This step checks audio accessory keying.

(1) Check step 5a as follows:

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
5	a. Audio accessory keying.	a. Set key switch on accessory to INTERCOM (INT) position.	a. Key switch locks at INT position, and AM-1780 relays click.

(2) If step 5a checks good, do step 5b as follows:

b. Audio accessory sidetone.	b. Speak into mike.	b. Voice sidetone is heard.
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(Set the key switch to the center position before going on.)

(3) If step 5b checks good, step 6 would be checked.

f. EPC step 6. This step checks the shutdown of the intercom set. Check step 6 as follows:

<u>STEP NUMBER</u>	<u>FUNCTION CHECKED</u>	<u>ACTION</u>	<u>NORMAL INDICATION</u>
6	Shutdown.	Set AM-1780 CKT BKR switch to OFF.	AM-1780 POWER lamp goes off.

If the entire op check checks good, follow the directions below.

DIRECTIONS

Turn the AM-1780 MAIN PWR switch, set the vehicle MASTER power SWITCH and MX-7777 circuit breaker switches to their OFF positions.

6. COMPLETION OF DA FORM 2404.

a. A DA Form 2404 is completed each time an operational check is done on a communication system. If a system checks good, the completed DA Form 2404 would look like Figure 27.

EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET					
For use of this form, see TM 36-750; the proponent agency is the Office of the Deputy Chief of Staff for Logistics.					
1. ORGANIZATION A 5/32 FA		2. NOMENCLATURE AND MODEL INTERCOMMUNICATION SET AN/VIC-1 (V)			
3. REGISTRATION/SERIAL/MSN 5830-00-856-3273	4a. MILES	4b. HOURS	4c. ROUNDS FIRED	4d. HOT STARTS	5. DATE 15 JAN 86
					6. TYPE INSPECTION EVALUATION
7. APPLICABLE REFERENCE					
TM NUMBER 11-5830-340-12		TM DATE 15 JAN 86		TM NUMBER	
TM DATE					
COLUMN a - Enter TM item number.			COLUMN d - Show corrective action for deficiency or shortcoming listed in Column c.		
COLUMN b - Enter the applicable condition status symbol.			COLUMN e - Individual ascertaining completed corrective action initial in this column.		
COLUMN c - Enter deficiencies and shortcomings.					
STATUS			REMARKS		
<p>"X"-Indicates a deficiency in the equipment that places it in an inoperable status.</p> <p>CIRCLED "X"-Indicates a deficiency, however, equipment may be operated under specific limitations as directed by higher authority or as prescribed. Corrective action can be accomplished.</p> <p>HORIZONTAL DASH "-"-Indicates that a required inspection, component replacement, or test flight is due but has not been accomplished, or an overdue MWO has not been accomplished.</p>			<p>DIAGONAL "U"-Indicates a material defect other than a deficiency which must be corrected to increase deficiency or to make the item completely serviceable.</p> <p>LAST NAME INITIAL IN BLACK, BLUE-BLACK INK, OR PENCIL-Indicates that a completely satisfactory condition exists.</p> <p>FOR AIRCRAFT-Status symbols will be recorded in red.</p>		
ALL INSPECTIONS AND EQUIPMENT CONDITIONS RECORDED ON THIS FORM HAVE BEEN DETERMINED IN ACCORDANCE WITH DIAGNOSTIC PROCEDURES AND STANDARDS IN THE TM CITED HEREON.					
8a. SIGNATURE (Person performing inspection)		8b. TIME		8c. SIGNATURE (Maintenance Supervisor)	
				8d. TIME	
				REMANUFACTOR REQUIRED	
TM ITEM NO.	STATUS	DEFICIENCIES AND SHORTCOMINGS		CORRECTIVE ACTION	INITIAL WHEN CORRECTED
		17 JAN 86			REC

DA FORM 2404 1 APR 79 Replaces edition of 1 Jan 84, which will be used

Figure 27. Completed DA Form 2404 for a no-fault op check.

b. However, if a fault is found when checking the system, it would be recorded as shown on Figure 28. If a fault is found, repairs or a request for repairs would be initiated to put the system back into operation.

EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET						
For use of this form, see TM 38-750; the responsible agency is the Office of the Deputy Chief of Staff for Logistics.						
1. ORGANIZATION A 5/32 FA			2. NOMENCLATURE AND MODEL INTERCOMMUNICATION SET AN/VIC-1(V)			
3. REGISTRATION/SERIAL/NSN 5830-00-856-3273	4a. MILES	4b. HOURS	5. ROUNDS FIRED	6. HOT STARTS	7. DATE 17 JAN 86	8. TYPE INSPECTION EVALUATION
7. APPLICABLE REFERENCE						
TM NUMBER 11-5830-340-12		TM DATE 15 JAN 86		TM NUMBER		TM DATE
COLUMN a - Enter TM Item number. COLUMN b - Enter the applicable condition status symbol. COLUMN c - Enter deficiencies and shortcomings.			COLUMN d - Show corrective action for deficiency or shortcoming listed in Column c. COLUMN e - Individual ascertaining completed corrective action initial in this column.			
<p align="center">STATUS SYMBOLS</p> <p>"X"-Indicates a deficiency in the equipment that places it in an inoperable status.</p> <p>CIRCLED "X"-Indicates a deficiency, however, the equipment may be operated under specific limitations as directed by higher authority or as prescribed locally, until corrective action can be accomplished.</p> <p>HORIZONTAL DASH "-I-"-Indicates that a requirement, replacement, maintenance action check, or test flight is due but has not been accomplished on overdue MWO has not been accomplished.</p> <p>DIAGONAL "/"-Indicates a material defect other than a deficiency which must be corrected to inoperable.</p> <p>LAST NAME INITIAL IN BLACK, BLUE-BLACK INK, OR PENCIL-Indicates that a completely satisfactory condition exists.</p> <p>FOR AIRCRAFT-Status symbols will be recorded in red.</p>						
ALL INSPECTIONS AND EQUIPMENT CONDITIONS RECORDED ON THIS FORM HAVE BEEN DETERMINED IN ACCORDANCE WITH DIAGNOSTIC PROCEDURES AND STANDARDS IN THE TM CITED HEREON.						
9a. SIGNATURE (Personnel performing inspection) Robert E. Dewey		9b. TIME SP4		9c. SIGNATURE (Maintenance Supervisor)		9d. TIME REMANHOURS REQUIRED
TM ITEM NO. a	STATUS b	DEFICIENCIES AND SHORTCOMINGS c		CORRECTIVE ACTION d		INITIAL WHEN CORRECTED e
(16)	X	MX-777 CKT				
		BKR TRIP OFF				

DA FORM 2404
1 APR 79

Replaces edition of 1 Jan 84, which will be used

Figure 28. DA Form 2404 completed when fault found that requires support maintenance repairs.

7. SUMMARY. You have just completed a lesson on how to evaluate the operation of intercommunication set AN/VIC-1(V). You have learned how to do the initial adjustments, how to verify the installation of the set, how to make presets on the system, and how to do an operational check on the system to identify normal and abnormal indications and how to record these findings on a DA Form 2404. If you will apply the skills and knowledge learned in this lesson, you will be able to correctly evaluate the overall operation of an intercommunication set AN/VIC-1(V).